

Appl. No. 09/829,797

IN THE CLAIMS

1. (Previously Presented) A semiconductor device comprising a bond pad structure, which bond pad structure comprises a bond pad disposed above a layered structure that increases structural integrity of the bond pad structure, wherein the layered structure comprises a top and bottom metal layer, a plurality of intermediate metal layers, at least one layer of dielectric material, and a plurality of equally spaced parallel via lines that connect the top and bottom metal layers and partition the at least one dielectric area to form isolated areas filled with dielectric material, and wherein the isolated areas filled with dielectric material have a surface to volume ratio such that an amount of elastic energy to be released when a crack is formed in the dielectric material is smaller than an amount of surface energy to be gained when the crack is formed.
2. (Original) A semiconductor device as claimed in claim 1, wherein the via lines are lines of tungsten.
3. (Previously Amended) A semiconductor device as claimed in claim 1, wherein a stack of layered structures is present.
4. (Original) A semiconductor device as claimed in claim 3, wherein the metal layer in each layered structure is a metal plate.

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5. (Original) A semiconductor device as claimed in claim 4, wherein the top and bottom metal layers of the stack are metal plates, and the intermediate metal layer or layers are parallel metal lines.

6. (Original) A semiconductor device as claimed in claim 5, wherein the metal lines are patterned in the form of a grid.

7. (Previously Amended) A semiconductor device as claimed in claim 1, wherein the via lines are patterned in the form of a grid.

8.-11. (Cancelled)

12. (Previously Presented) The semiconductor device of Claim 1 wherein the dielectric material comprises hydrogen silsesquioxane.

13. (Previously Presented) The semiconductor device of Claim 1 wherein the isolated areas of dielectric material have dimensions that are less than that of the bonding pad.

14. (Previously Presented) The semiconductor device of Claim 1 wherein the isolated areas of dielectric material have dimensions that are chosen in dependence upon the composition of the dielectric material.